IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES
(Attorney Docket № 14183US02)

In the Application of:

Ed H. Frank, et al.

Serial No. 10/658,734

Filed: September 9, 2003

For: METHOD AND SYSTEM FOR OPTIMAL LOAD BALANCING IN A HYBRID WIRED/WIRELESS NETWORK

Examiner: Win, Aung T.

Group Art Unit: 2617

Confirmation No. 2791

Electronically filed on June 30, 2010

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal from an Office Action dated January 7, 2010 ("Final Office Action"), in which claims 1-22 and 24-46 were finally rejected. The Appellant respectfully requests that the Board of Patent Appeals and Interferences ("Board") reverses the final rejection of claims 1-22 and 24-46 of the present application. The Appellant notes that this Appeal Brief is timely filed within the period for reply that ends on July 12, 2010.

REAL PARTY IN INTEREST
(37 C.F.R. § 41.37(c)(1)(i))

Broadcom Corporation, a corporation organized under the laws of the state of California, and having a place of business at 5300 California Avenue, Irvine, California 92617, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel 014199, Frame 0948 in the PTO Assignment Search room.

RELATED APPEALS AND INTERFERENCES
(37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

STATUS OF THE CLAIMS
(37 C.F.R. § 41.37(c)(1)(iii))

The present application includes pending claims 1-22 and 24-46, all of which have been rejected. The Appellant identifies claims 1-22 and 24-46 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

STATUS OF AMENDMENTS
(37 C.F.R. § 41.37(c)(1)(iv))

The Appellant has not amended any claims subsequent to the final rejection of claims 1-22 and 24-46 mailed on January 7, 2010.

SUMMARY OF CLAIMED SUBJECT MATTER
(37 C.F.R. § 41.37(c)(1)(v))

The Appellant has inserted Figs. 2d, 3a-3b and 3g of the present application below, to illustrate several aspects of the invention.

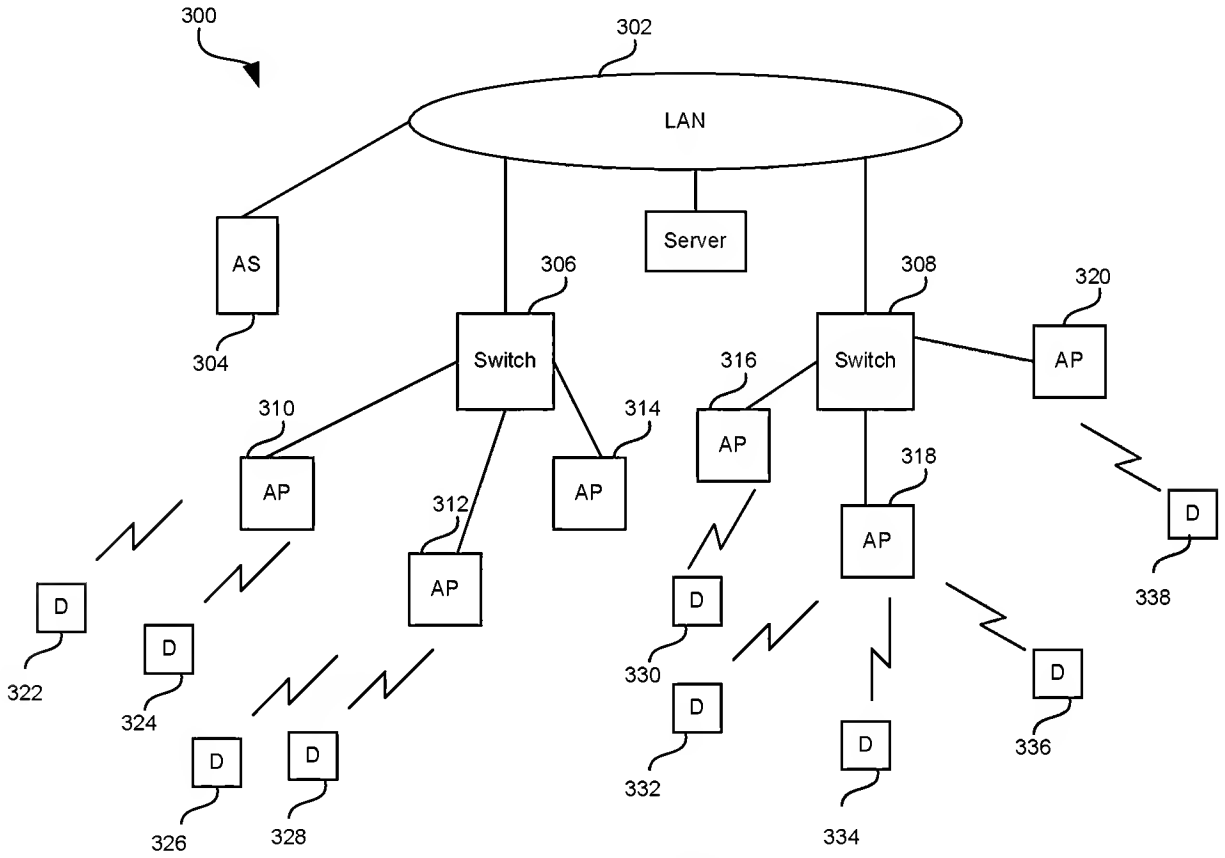

FIG. 3

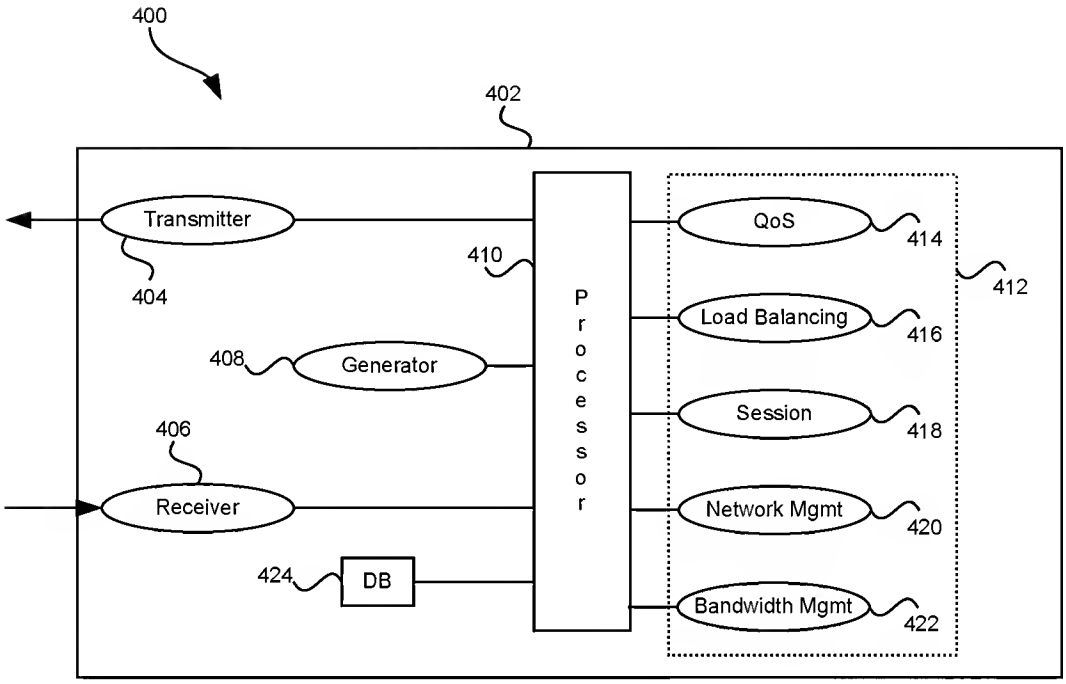
400
402
Transmitter
404
410
Processor
QoS
414
412
Load Balancing
416
408
Generator
Session
418
406
Receiver
Network Mgmt
420
424
DB
Bandwidth Mgmt
422

FIG. 4

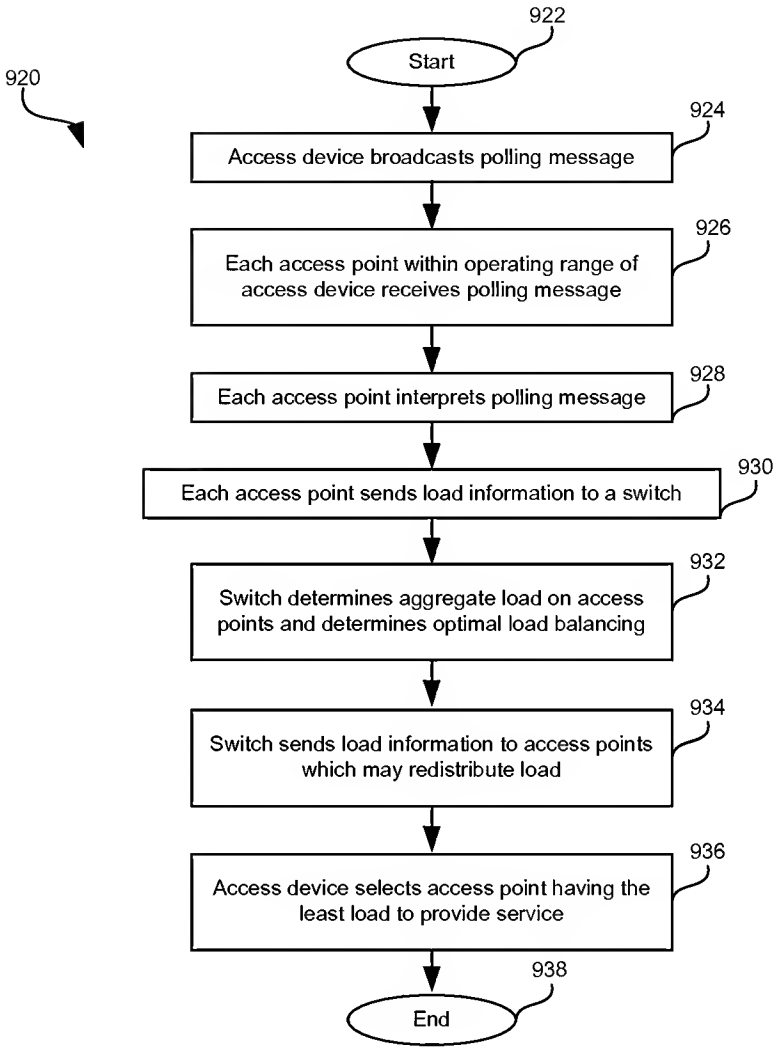
920
922
Start
924
Access device broadcasts polling message
926
Each access point within operating range of access device receives polling message
928
Each access point interprets polling message
930
Each access point sends load information to a switch
932
Switch determines aggregate load on access points and determines optimal load balancing
934
Switch sends load information to access points which may redistribute load
936
Access device selects access point having the least load to provide service
938
End

FIG. 9b

Independent claim 1 recites the following:

A method for communication, the method comprising:

receiving one or more polling message[1] from an access device[2] by one or more of a plurality of access points[3] in a hybrid wired/wireless local area network[4];

responsive to said one or more polling message[5], communicating a load[6] on said one or more of said plurality of access points to a switch[7], wherein said switch determines optimal load balancing[8] for said one or more of said plurality of access points based on said communicated load; and

communicating information of said determined optimal load balancing for said one or more of said plurality of access points[9] to said access device[10], wherein said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing[11].

Claims 2-8 are dependent directly or indirectly upon independent claim 1.

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[1] *See* present specification, e.g., Fig. 3, message from access device D 328 to access point AP 312; p.8, ¶20, lines 3-4.
[2] *See id.*, e.g., Fig. 3, access device D 328, also Fig. 9b, step 924; p.8, ¶20, lines 3-4.
[3] *See id.*, e.g., Fig. 3, access point AP 312, also Fig. 9b, step 926; p.8, ¶20, lines 3-4.
[4] *See id.*, e.g., Fig. 3, network 300; p.8, ¶20, lines 2-3.
[5] *See id.*, e.g., Fig. 9b, step 928; p.30, ¶88, line 5.
[6] *See id.*, e.g., Fig. 9b, step 930; p.8, ¶21, lines 1-3 and p.30, ¶88, line 6.
[7] *See id.*, e.g., Fig. 3, switch 306.
[8] *See id.*, e.g., Fig. 9b, step 932; p.8, ¶21, lines 3-5 and p.30, ¶88, lines 6-8.
[9] *See id.*, e.g., Fig. 9b, step 934; p.8, ¶21, lines 5-7 and p.30, ¶88, lines 8-9.
[10] *See id.*, e.g., Fig. 9b, step 934; p.8, ¶20, lines 4-7 and p.30, ¶88, lines 8-9.
[11] *See id.*, e.g., Fig. 9b, step 936; p.30, ¶88, lines 9-10.

Independent claim 9 recites the following:

A computer-readable medium for storing a computer program for execution by computer[12], having one or more code section for communication, the one or more code section executable by a computer for causing the computer to perform the steps comprising:

receiving one or more polling message[13] from an access device[14] by one or more of a plurality of access points[15] in a hybrid wired/wireless local area network[16];

responsive to said one or more polling message[17], communicating a load[18] on said one or more of said plurality of access points to a switch[19], wherein said switch determines optimal load balancing[20] for said one or more of said plurality of access points based on said communicated load; and

communicating information of said determined optimal load balancing for said one or more of said plurality of access points[21] to said access device[22], wherein said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said optimal load balancing[23].

Claims 10-16 are dependent directly or indirectly upon independent claim 9.

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[12] *See id.*, e.g., p.8, ¶21, lines 1-5.
[13] *See id.*, e.g., Fig. 3, message from access device D 328 to access point AP 312; p.8, ¶20, lines 3-4.
[14] *See id.*, e.g., Fig. 3, access device D 328, also Fig. 9b, step 924; p.8, ¶20, lines 3-4.
[15] *See id.*, e.g., Fig. 3, access point AP 312, also Fig. 9b, step 926; p.8, ¶20, lines 3-4.
[16] *See id.*, e.g., Fig. 3, network 300; p.8, ¶20, lines 2-3.
[17] *See id.*, e.g., Fig. 9b, step 928; p.30, ¶88, line 5.
[18] *See id.*, e.g., Fig. 9b, step 930; p.8, ¶21, lines 1-3 and p.30, ¶88, line 6.
[19] *See id.*, e.g., Fig. 3, switch 306.
[20] *See id.*, e.g., Fig. 9b, step 932; p.8, ¶21, lines 3-5 and p.30, ¶88, lines 6-8.
[21] *See id.*, e.g., Fig. 9b, step 934; p.8, ¶21, lines 5-7 and p.30, ¶88, lines 8-9.
[22] *See id.*, e.g., Fig. 9b, step 934; p.8, ¶20, lines 4-7 and p.30, ¶88, lines 8-9.
[23] *See id.*, e.g., Fig. 9b, step 936; p.30, ¶88, lines 9-10.

Independent claim 17 recites the following:

A system for communication, the system comprising:

one or more receiver[24] of one or more of a plurality of access points[25] that receives one or more polling message[26] from an access device[27] in a hybrid wired/wireless local area network[28];

one or more controller[29] that communicates a load[30] on said one or more of said plurality of access points to a switch[31], wherein said switch determines optimal load balancing[32] for said one or more of said plurality of access points based on said communicated load in response to said one or more polling message[33]; and

one or more transmitter[34] that communicates information of said determined optimal load balancing for said one or more of said plurality of access points[35] to said access device[36], wherein said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said optimal load balancing[37].

Claims 18-22 and 24-26 are dependent directly or indirectly upon independent claim 17.

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[24] *See id.*, e.g., p.8, ¶23, lines 1-3.
[25] *See id.*, e.g., Fig. 3, access point AP 312, p.8, ¶23, lines 3-4, also Fig. 9b, step 926.
[26] *See id.*, e.g., Fig. 9b, step 928; p.30, ¶88, line 5.
[27] *See id.*, e.g., Fig. 3, access device D 328, p.8, ¶23, lines 3-4, also Fig. 9b, step 924.
[28] *See id.*, e.g., Fig. 3, network 300; p.8, ¶23, lines 1-2.
[29] *See id.*, e.g., Fig. 4, controller 412 in switch 402, p.8, ¶23, lines 4-5.
[30] *See id.*, e.g., Fig. 9b, step 930; p.8, ¶21, lines 1-3 and p.30, ¶88, line 6.
[31] *See id.*, e.g., Fig. 3, switch 306.
[32] *See id.*, e.g., Fig. 9b, step 932; p.8, ¶21, lines 3-5 and p.30, ¶88, lines 6-8.
[33] *See id.*, e.g., p.8-9, ¶23, lines 5-6, Fig. 9b, step 928; p.30, ¶88, line 5.
[34] *See id.*, e.g., p.9, ¶23, lines 6-7.
[35] *See id.*, e.g., Fig. 9b, step 934; p.9, ¶23, lines 6-7 and p.30, ¶88, lines 8-9.
[36] *See id.*, e.g., Fig. 9b, step 934; p.9, ¶23, lines 6-7 and p.30, ¶88, lines 8-9.
[37] *See id.*, e.g., Fig. 9b, step 936; p.30, ¶88, lines 9-10.

Independent claim 27 recites the following:

A method for communication, the method comprising:

transmitting one or more polling message[38] from a mobile station[39] in a hybrid wired/wireless local area network[40], wherein said transmitted one or more polling message causes one or more of a plurality of access points[41] that receives said transmitted one or more polling message[42] to communicate a corresponding load[43] to a switch[44], wherein said switch determines optimal load balancing[45] for said one or more of said plurality of access points based on said communicated corresponding load;

receiving from said one or more of said plurality of access points[46], said determined optimal load balancing for said one or more of said plurality of access points; and

selecting and re-establishing communication by said mobile station with one of said plurality of access points based on said received optimal load balancing[47].

Claims 28-36 are dependent directly or indirectly upon independent claim 27.

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[38] *See id.*, e.g., Fig. 3, message from access device D 328 to access point AP 312; p.8, ¶20, lines 3-4.
[39] *See id.*, e.g., Fig. 3, access device D 328, also Fig. 9b, step 924; p.8, ¶20, lines 3-4.
[40] *See id.*, e.g., Fig. 3, network 300; p.8, ¶20, lines 2-3.
[41] *See id.*, e.g., Fig. 3, access point AP 312, also Fig. 9b, step 926; p.8, ¶20, lines 3-4.
[42] *See id.*, e.g., Fig. 9b, step 928; p.30, ¶88, line 5.
[43] *See id.*, e.g., Fig. 9b, step 930; p.8, ¶21, lines 1-3 and p.30, ¶88, line 6.
[44] *See id.*, e.g., Fig. 3, switch 306.
[45] *See id.*, e.g., Fig. 9b, step 932; p.8, ¶21, lines 3-5 and p.30, ¶88, lines 6-8.
[46] *See id.*, e.g., Fig. 9a, step 910 and Fig. 9b, step 934; p.8, ¶21, lines 5-7 and p.30, ¶88, lines 8-9.
[47] *See id.*, e.g., Fig. 9a, step 912 and Fig. 9b, step 936; p.30, ¶88, lines 9-10.

Independent claim 37 recites the following:

A system for communication, the system comprising:

one or more processors in a mobile station[48], said one or more processors are that transmits one or more polling message[49] from said mobile station in a hybrid wired/wireless local area network[50], wherein said transmitted one or more polling message causes one or more of a plurality of access points that receives said transmitted one or more polling message[51] to communicate a corresponding load[52] to a switch[53], wherein said switch determines optimal load balancing[54] for said one or more of said plurality of access points based on said communicated corresponding load;

said or more processors are that receives from said one or more of said plurality of access points[55], information of said determined optimal load balancing for said one or more of said plurality of access points; and

said or more processors are that selects and re-establishes communication by said mobile station with one of said plurality of access points based on said information for said determined optimal load balancing[56].

Claims 38-46 are dependent directly or indirectly upon independent claim 37.

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[48] *See id.*, e.g., Fig. 3, access device D 328, also Fig. 9b, step 924; p.8, ¶20, lines 3-4.
[49] *See id.*, e.g., Fig. 3, message from access device D 328 to access point AP 312; p.8, ¶20, lines 3-4.
[50] *See id.*, e.g., Fig. 3, network 300; p.8, ¶20, lines 2-3.
[51] *See id.*, e.g., Fig. 9b, step 928; p.30, ¶88, line 5.
[52] *See id.*, e.g., Fig. 9b, step 930; p.8, ¶21, lines 1-3 and p.30, ¶88, line 6.
[53] *See id.*, e.g., Fig. 3, switch 306.
[54] *See id.*, e.g., Fig. 9b, step 932; p.8, ¶21, lines 3-5 and p.30, ¶88, lines 6-8.
[55] *See id.*, e.g., Fig. 9a, step 910 and Fig. 9b, step 934; p.8, ¶21, lines 5-7 and p.30, ¶88, lines 8-9.
[56] *See id.*, e.g., Fig. 9b, step 936; p.30, ¶88, lines 9-10.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-22 and 24-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPP 20020085719 ("Crosbie") in view of USP 6,069,871 ("Sharma"). See the Final Office Action at pages 2-6. The Appellant identifies claims 1-22 and 24-46 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

REJECTION UNDER 35 U.S.C. § 103

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 ("MPEP") states the following:

> The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR International Co. v. Teleflex Inc., 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

> The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

I. The Proposed Combination of Crosbie and Sharma Does Not Render Claims 1-22 and 24-26 Unpatentable

The Appellant now turns to the rejection of claims 1-22 and 24-46 under 35 U.S.C. 103(a) as being unpatentable over Crosbie in view of Sharma.

A. Rejection of Independent Claims 1, 9, 17, 27 and 37

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Appellant submits that the combination of Crosbie and Sharma does not disclose or suggest at least the limitation of "receiving one or more polling message from an access device by one or more of a plurality of access points in a hybrid wired/wireless local area network", "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load" or "said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing," as recited in Appellant's claim 1.

The Appellant has inserted Crosbie's Figs. 1-3 and Sharma's Fig. 1 for reference:

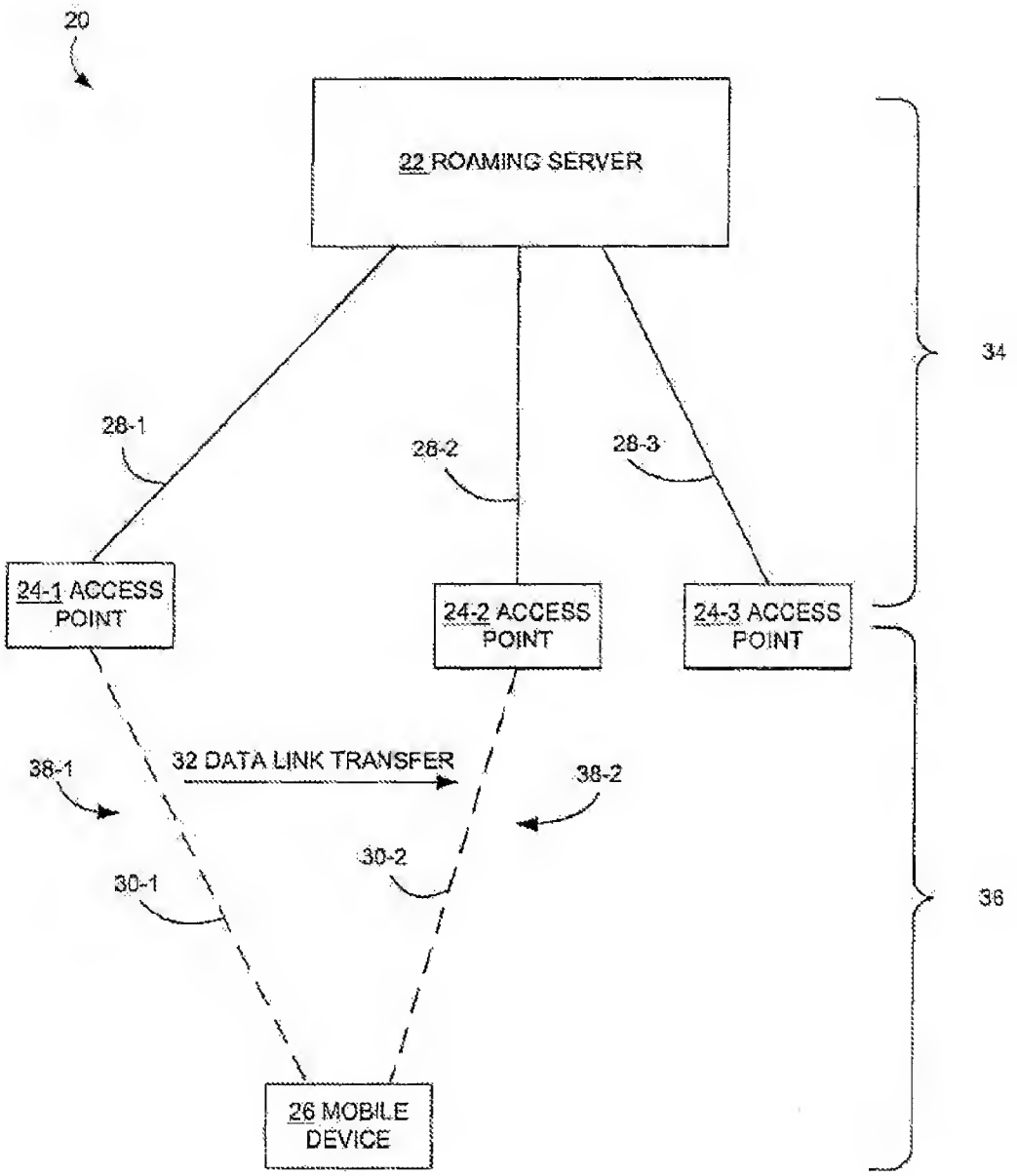
20
22 ROAMING SERVER
34
28-1
28-2
28-3
24-1 ACCESS POINT
24-2 ACCESS POINT
24-3 ACCESS POINT
38-1
32 DATA LINK TRANSFER
38-2
30-2
30-1
36
26 MOBILE DEVICE

FIG. 1

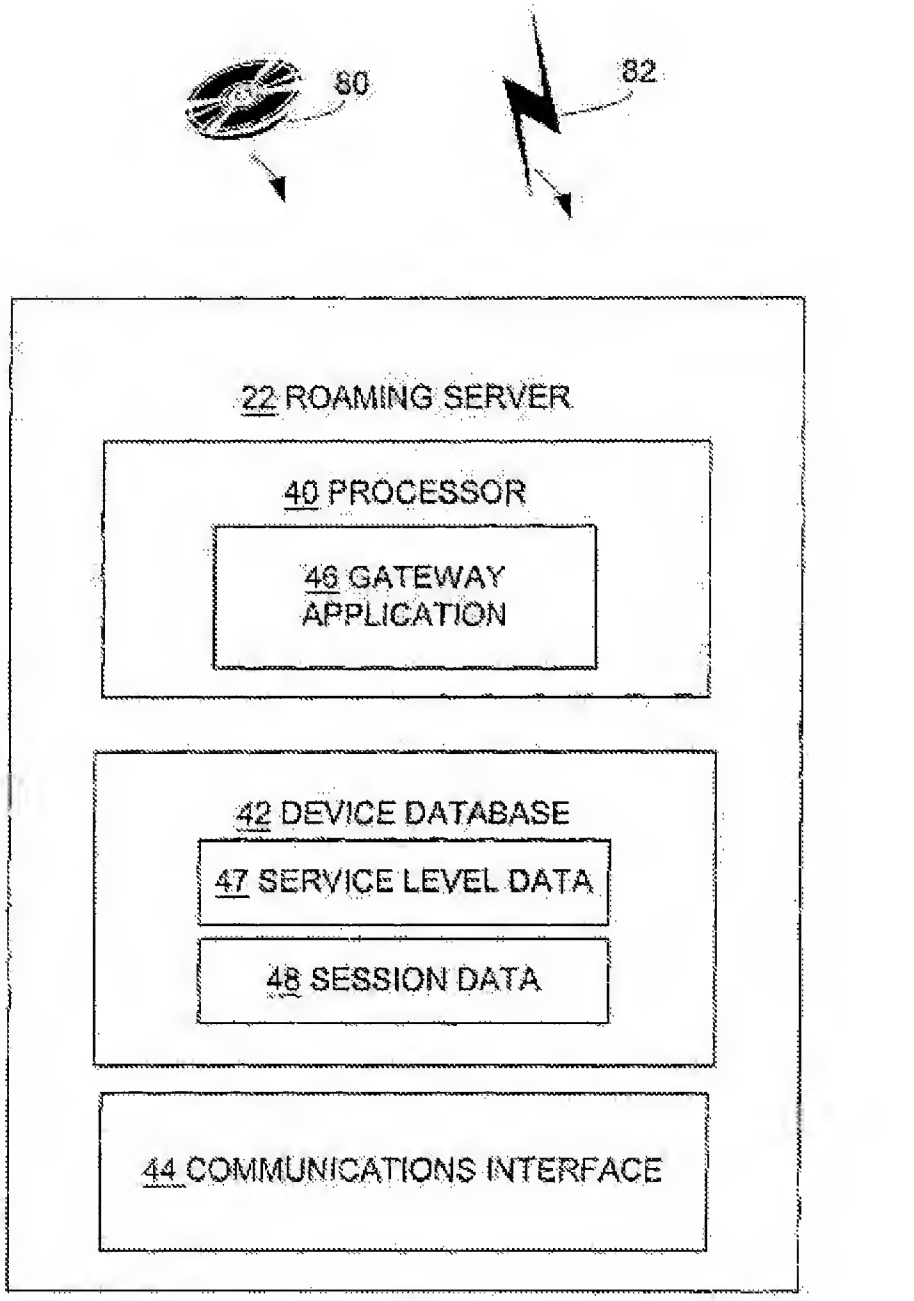
80
82
22 ROAMING SERVER
40 PROCESSOR
46 GATEWAY APPLICATION
42 DEVICE DATABASE
47 SERVICE LEVEL DATA
48 SESSION DATA
44 COMMUNICATIONS INTERFACE

FIG. 2

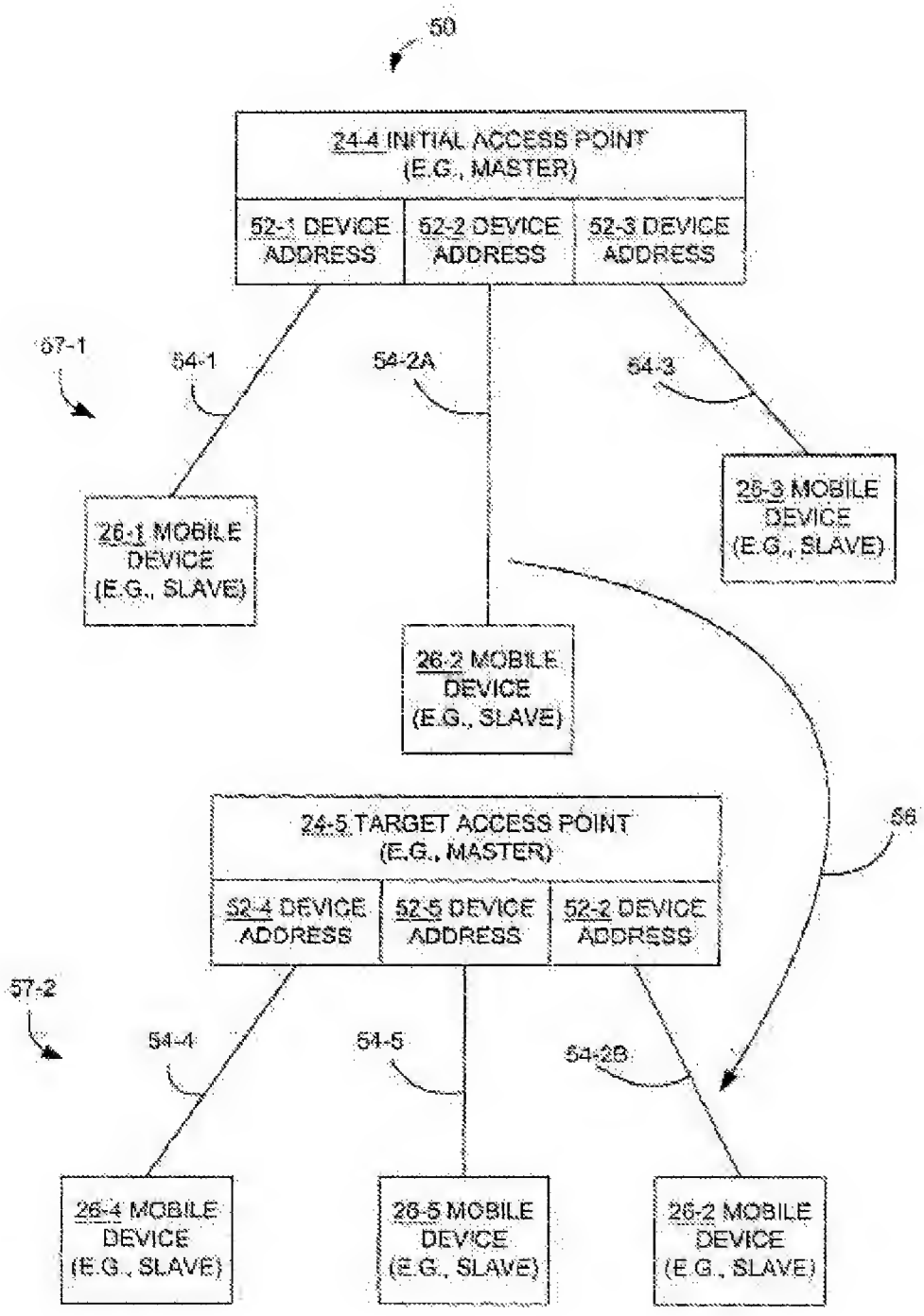
50
24-4 INITIAL ACCESS POINT (E.G., MASTER)
52-1 DEVICE ADDRESS
52-2 DEVICE ADDRESS
52-3 DEVICE ADDRESS
57-1
54-1
54-2A
54-3
26-1 MOBILE DEVICE (E.G., SLAVE)
26-3 MOBILE DEVICE (E.G., SLAVE)
26-2 MOBILE DEVICE (E.G., SLAVE)
24-5 TARGET ACCESS POINT (E.G., MASTER)
52-4 DEVICE ADDRESS
52-5 DEVICE ADDRESS
52-2 DEVICE ADDRESS
56
57-2
54-4
54-5
54-2B
26-4 MOBILE DEVICE (E.G., SLAVE)
26-5 MOBILE DEVICE (E.G., SLAVE)
26-2 MOBILE DEVICE (E.G., SLAVE)

FIG. 3

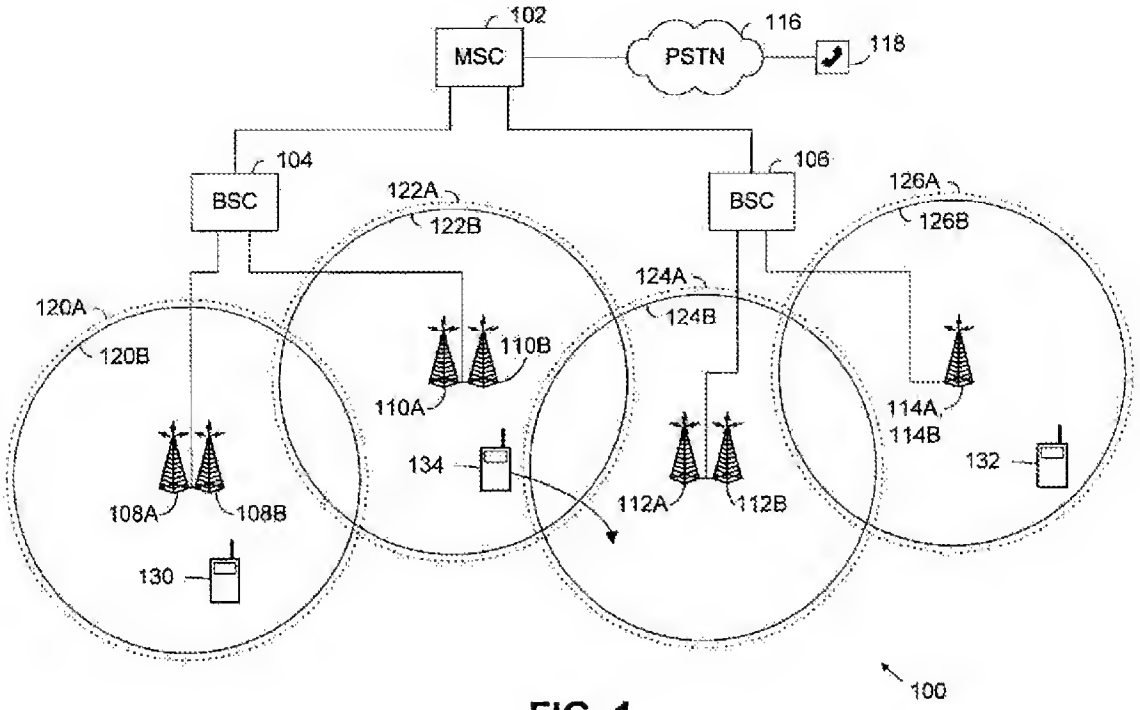

FIG. 1

In the Final Office Action, the Examiner states the following:

> "Regarding claim 1, Crosbie discloses ...**Receiving one or more polling message** from an access device by one or more of a plurality of access points in a hybrid wired/wireless local area network [**receiving service request message** from mobile device by access point in a hybrid wired/wireless local area network [hybrid wired/wireless network: Figure 1] [service request message: 0044];..."

See page 2 at the Final Office Action (emphasis added). The Examiner relies for support on Crosbie's Fig. 1, and equates Crosbie's wireless local area network, mobile device 26, access point 24-1 to 24-3, and roaming server 22 to Appellant's "hybrid wired/wireless local area network", "access device" "access point" and "switch", respectively.

The Examiner, however, relies for support on Crosbie (*see* ¶0044) and equates Crosbie's service request to Appellant's "polling message". More specifically, Crosbie states the following:

> "[0044] In operation, the mobile device 26 requests service from an access point 24 by sending a request along with the device address of the mobile device 26...**the access point 24 passes the request along with the device address of the mobile device 26 back to the roaming server 22** which looks up the user's service level data 47 in the device database 42 (see FIG. 2) and the loading on each of the relevant access points 24 (e.g., traffic or congestion on the subnet that the mobile device 26 is connected to). In the case of the Bluetooth technology, **the roaming server 22 then directs that the mobile device 26 connect to the appropriate access point 24 (this may not be the access point 24 that received the request)**. For example, the mobile device 26 requests service from access point 24-1, but, after determining the user's service level, the roaming server 22 signals access point 24-2 to page the mobile device 26 and establish a connection 30-2...
>
> [0045] When the mobile device 26 moves to a new connection 38 and starts to send packets, **the roaming server 22 looks up the mobile device 26 in the device database 42, and according to the user service level data 47 and WLAN loading, the roaming server 22 might decide that the mobile device 26 should be communicating via another connection 38 that is covering that mobile device 26**... The roaming server 22 may direct the mobile device 26 to a different access point 24. In either case the mobile device 26 is forced to transfer its connection 30."

See Crosbie at ¶¶0044-0045. The Appellant respectfully disagrees, and points out that Crosbie discloses that the service request is merely for sending a device address to the access point 24. Crosbie simply does not disclose or suggest that the service request itself is an alleged "polling message", or that the service request includes any "polling message".

The Examiner in the 3/29/10 Advisory Office Action (see page 2) argues the following:

> "Examiner disagrees…Crosbie's service request is a polling message since mobile device transmits service request message to access point in order to receive optimal load balancing information i.e., which access point is the less congested access point for the mobile to select for initiating communications or reestablishing communications [Crosbie: (0035-0047)]…**Applicant's arguments also fail to comply with 37 CFR 1.111(b)...without specifically pointing out how the language of the claims patentably distinguishes them from the references**..."

The Examiner alleges that Appellant's "polling message" fails to specify how Appellant's claim language differs from Crosbie's service request. The Appellant respectfully disagrees, and points out that Appellant's claim language at least recites what function the access device's "polling message" performs on the access point.

For example, Appellant's claim 1 recites that the received "polling message" at least causes a plurality of access points to communicate their corresponding loads to a switch. Crosbie, however, does not disclose or suggest that after receiving the service request (the alleged "polling message"), each of the APs 24 sends its corresponding load to the alleged switch (the roaming server 22). Instead, Crosbie's ¶¶0044-0047 disclose that in response to receiving the service request (the alleged "polling message") from the mobile device 26 (the alleged "access device"), the access point 24 simply passes the same request along with the mobile device address to the alleged "switch" (roaming server 22). In this regard, Crosbie at least does not disclose or suggest that the service request (the alleged "polling message") causes the access

point 24 to communicate the load information of the access point 24 to the alleged switch (the roaming server 22). Accordingly, Appellant's "polling message" in claim 1 complies with 37 CFR 1.111(b), and the Appellant maintains that Crosbie's service request is not the alleged "polling message".

Based on the foregoing rationale, the Appellant also maintains that Crosbie does not disclose or suggest "receiving one or more polling message from an access device by one or more of a plurality of access points in a hybrid wired/wireless local area network," as recited in Appellant's claim 1. Sharma does not overcome Crosbie's above deficiency.

Nevertheless, even assuming arguendo that Crosbie's service request is the alleged "polling message" (which it is not), Crosbie still does not disclose or suggest "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch," as recited in Appellant's claim 1.

For example, Crosbie's ¶0044 discloses that the service level of the mobile device 26 (the alleged "access device") and the loading level of the access point 24 have been (previously) stored inside a database 42 within the roaming server 22 (the alleged "switch"). Upon receiving the forwarded service request (the alleged "polling message") from the AP 24, the roaming server 22 (the alleged "switch") looks up the service level of the mobile device 26 (the alleged "access device") and the loading level of the access point 24 have been (previously) stored inside its database 42, and the

roaming server 22 (the alleged "switch") directs the mobile device 26 to connect to the AP 24 with the least congestion.

Accordingly, the Appellant maintains that Crosbie also does not disclose or suggest "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch," as recited in Appellant's claim 1.

With regard to the rejection of claim 1, the Appellant further submits that Crosbie also does not disclose or suggest "said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load," as recited in Appellant's claim 1. In the Final Office Action, the Examiner further states the following:

> "Crosbie discloses...determining a load on said one or more of said plurality of access points for optimal loading balancing [Roaming server i.e., switch: 0035] [In responsive to service request message, Roaming server determines loads on relevant access points and centrally controls the network based on determined loads on access points for load balancing among access points and improving the radio link quality of service: 007, 0042-0047 & 0055]; ..."

See pages 2-3 at the Final Office Action. Even though Crosbie (*see* ¶¶0007, 0042-0047) discloses load balancing in connection transfer, Crosbie, nevertheless, still does not disclose or suggest that "the load balancing determination is based on the communicated load" (i.e., communicated from the AP 24).

The Examiner is referred to Appellant's above arguments, that Crosbie (*see* ¶0044) discloses that the roaming server 22 (the alleged "switch") looks up from its own

database 42, the stored service level of the mobile device 26 and the loading information of the AP 24. **In this regard, Crosbie does not disclose or suggest that the roaming server (the alleged "switch") determines load balancing for the AP 24 based on the load information communicated from the AP 24**.

The Examiner concedes the following in the Final Office Action *(see* page 3) and in the Advisory Office Action:

> "Crosbie does not explicitly disclose ... "communicating a load of access point to a switch in response to polling message i.e., service request message." However **it would have been obvious to one of ordinary skilled in the art that roaming server 22 i.e., a switch which is connected to access points must be communicating each other in order to determine each access point's load to facilitate Crosbie's load balancing method and system**."

The Examiner's above argument is provided without factual support from Crosbie, and it constitutes a conclusory statement (prohibited by MPEP at § 2142). Even assuming arguendo, that there is a load communication between Crosbie's access point and the alleged switch (roaming server 22), there is still no support that such AP 24 load communication is communicated to the alleged switch along with the mobile device service request. Crosbie clearly discloses that only the mobile device 26 address is sent to the roaming server 22, and nothing else. Furthermore, Crosbie also does not disclose or suggest that the roaming server 22's database stores the AP 24's load information as a result of the AP 24 receiving a service request from the mobile device 26.

Therefore, based on the foregoing arguments, the Appellant maintains that the Examiner has not established a prima facie case of obviousness that Crosbie suggests "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch," as recited in Appellant's claim 1.

Nevertheless, the Examiner looks to Sharma to overcome Crosbie's above deficiencies and states the following in the Final Office Action (*see* page 3):

> "Sharma et al. also discloses the centrally controlled optimal load balancing method in a wireless network [see Figures] in which access points i.e., Base stations communicate load information to the switch i.e., BSC in response to mobile device service request message [Column 4, Line 65-Column 5, Line 60]."

The Appellant points out that the Examiner's reliance on Sharma to overcome Crosbie's above deficiency is moot, at least based on Appellant's initial argument that both Crosbie and Sharma do not disclose the alleged "polling message". Nevertheless, even assuming arguendo, that Crosbie's service request is the alleged "polling message" (which it is not), Sharma still does not discloses or suggest "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch," as recited in Appellant's claim 1.

More specifically, the Examiner equates Sharma's mobile switching center (MSC) 102 to the alleged "switch", Sharma's base station transceiver BTS 108A to the alleged "AP", Sharma's capacity indications to the alleged "load information" and Sharma's allocation determination to the alleged "optimal load balancing".

However, Sharma (see Sharma col. 4 line 64 - col. 5, lines 1-60) discloses that the capacity indications (the alleged "load information") is sent from the base station transceiver BTS 108A (the alleged "AP") **to the base station controller BSC 104** (**which is not the alleged "switch"**). In other words, **Sharma at least does not disclose or suggest that the alleged "AP" (i.e., the base station transceiver BTS 108A) sends its "load information" (i.e., the capacity indications) to the alleged "switch" (i.e., the mobile switching center (MSC) 102).**

Therefore, based on the foregoing rationale, the Appellant maintains that Sharma does not overcome Crosbie's deficiency, namely, Sharma also does not disclose or suggest "responsive to said one or more polling message, **communicating a load on** said one or more of said plurality of access points **to a switch**," as recited in Appellant's claim 1.

Since Sharma does not disclose that the alleged "switch" (i.e., the MSC 102) receives the alleged "communicated load information" (i.e., the load capacity information) from the alleged "AP" (i.e., BTS 108A), accordingly, Sharma also cannot disclose or suggest "said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load" as recited in Appellant's claim 1.

The Examiner states the following in the Advisory Office Action (*see* page 2):

> "Sharma discloses **base station controller (BSC 104)** which is connected to base stations queries base stations for capacity load information **to facilitate load balancing** [Column 5]. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention was

> made would realize that **modifying roaming server i.e., the switch to query connected access points for load information as taught by Sharma** et al.'s load information querying method would teach "communicating a load on said one or more of said plurality of access points to a switch" as claimed. It should be noted that applicant's arguments against the references individually, ..."

The Examiner, by his own admission, seems to agree with the Appellant, and in effect, concedes that **Sharma discloses that it is the base station controller BSC 104, but not the mobile switching center (MSC) 102 (the alleged "switch"), which receives the capacity indications (the alleged "load information") from the base station transceiver BTS 108A (the alleged "AP").**

In this regard, the Examiner's earlier allegation in the Advisory Office Action (see page 2), that Crosbie's roaming server 22 can be modified by Sharma's **base station controller BSC 104 (which is not the alleged "switch")**, to query or receive the alleged "load" from the AP 24, in fact, supports Appellant's arguments that the combination of Crosbie and Sharma does not disclose or suggest "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch," in as recited in Appellant's claim 1. Accordingly, the Examiner's remaining allegation that the Appellant "attacks Sharma's reference individually" to show non-obviousness in Crosbie, is therefore, moot.

Moreover, regarding the rejection of Appellant's claim 1, the Appellant further submits that the combination of Crosbie and Sharma does not disclose or suggest "said access device selects and re-establishes communication with one or more of said

plurality of access points based on said communicated information of said determined optimal load balancing," as recited in Appellant's claim 1.

The Examiner further states the following in the Final Office Action:

> "Crosbie discloses...**Communicating information of said determined optimal load balancing for said one or more of plurality of access points to said access device, wherein said access device selects** [communicating less congested access point to mobile device for mobile device to select less congested access point: (0044 & 0045)] **and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing** [communicating the mobile device to re-establish with less congested access point based on said communicated information of said determined optimal load balancing: 007,0042-0047 & 0055].
>
> Thus, Crosbie discloses that communication set up and hand-off management centrally controlled by roaming server i.e., claimed switch according to load information of access points to achieve network optimal load balancing [0044]..."

See pages 2-3 at the Final Office Action (emphasis added). The Appellant refers the Examiner to the above arguments, that the combination of Crosbie and Sharma does not disclose or suggest "responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load," as cited in Appellant's claim 1.

Moreover, the Appellant also points out that Crosbie does not disclose or suggest "said access device selects and re-establishes communication with one or more of said

plurality of access points based on said communicated information of said determined optimal load balancing," as recited in Appellant's claim 1.

For example, the Examiner is referred to the following citation of Crosbie:

"[0044] ...**the roaming server 22 then directs that the mobile device 26 connect to the appropriate access point 24 (this may not be the access point 24 that received the request)**. For example, the mobile device 26 requests service from access point 24-1, but, after determining the user's service level, the roaming server 22 signals access point 24-2 to page the mobile device 26 and establish a connection 30-2...

[0045] When the mobile device 26 moves to a new connection 38 and starts to send packets, the roaming server 22 looks up the mobile device 26 in the device database 42, and according to the user service level data 47 and WLAN loading, **the roaming server 22 might decide that the mobile device 26 should be communicating via another connection 38 that is covering that mobile device 26... The roaming server 22 may direct the mobile device 26 to a different access point 24. In either case the mobile device 26 is forced to transfer its connection 30.** For example, a user moves a mobile device 26 within range of both access points 24-1, 24-2. The mobile device 26 seeks to make a connection 30-1 to congested access point 24-1. **The roaming server 22 thus directs the mobile device 26 to join a less congested access point 24-2**, with the result shown by connection 30-2. Subsequently, the mobile device 26 moves to the less congested access point 24-2 in a seamless handoff, according to the techniques of the invention as described herein, without requiring re-registration with the roaming server 22...

[0047] ...**Then the roaming server 22 directs the mobile device 26 to transfer back from the secondary access point 24-2 to the primary access point 24-1**."

[0055] **In step 204, a communications interface 44 of the roaming server 22 detects a triggering event that initiates a transfer of the mobile device 26-2 from the initial access point 24-4 to the target access point 24-5**. This transfer is indicated by a communications link transfer 56 in FIG. 3. The triggering event, for example, can occur when the mobile device 26-2 is moved by the user from one location to another so that the mobile device 26-2 is moving out of range of the initial access point 24-4 and into range of the target access point 24-5. The triggering

> event can also be indicated by congestion or the need for load balancing for the initial access point 24-4. For example, point to point link 57-1 may become congested in comparison to point to point link 57-2. **Thus, the roaming server 22 initiates the transfer of the mobile device 26-2 from the initial access point 24-4 to the target access point 24-5**..."

See Crobsie at ¶¶0044-0047, 0055 (emphasis added). Crobsie clearly discloses that it is the roaming server 22 (the alleged "switch"), not the mobile device 26 (the alleged "access device"), which makes the decision to direct (the alleged "selection") the transfer of the mobile device 26 to leave from a congested AP 24-1 and to join a less congested AP 24-2 (the alleged "re-establishes communication with AP"). In this regard, Crosbie does not disclose or suggest "said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing," as recited in Appellant's claim 1.

Likewise, Sharma (*see* Sharma at col. 5, lines 25-60) discloses that it is the Base Station Controller BSC 104 (which is not the alleged "switch"), which performs dynamic load balancing to query the BTS 108A (the alleged "APs") in the wireless system 100. Sharma also discloses that the BSC 104 (which is not the alleged "switch") directs the mobile unit 134 (the alleged "access device") to execute a soft handover (the alleged "re-establishing communication") between BTS 110A to BTS 112A (the alleged "APs"). In this regard, Sharma also does not disclose or suggest "said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing," as

recited in Appellant's claim 1. Sharma therefore does not overcome Crosbie's above deficiency.

The Examiner further states the following in the Advisory Office Action (*see* pages 2-3):

> "Applicant argues Crosbie method, apparatus and system modified in view of Sharma does not teach according to that claims 1-22 and 24-46 since the combination of Crosbie and Sharma does not disclose or suggest the limitation **said access device selects and reestablishes communication with one or more of said plurality of access points based on said communicated information determined optimal load balancing**" as recited in Applicant's claim 1. **The reasons being(3.1) Crosbie and Sharma does not discloses or suggest said access device selects and reestablishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing".**
>
> "As stated in office action, mobile device communicating based on modified method and system selects and reestablishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing i.e., which access point is the less congested access point for the mobile to select for initiating communications or reestablishing communications [Crosbie: (0035-0 047)]. It should be noted that applicant's arguments against the references individually,…."

The Examiner's above allegation is contrary to Crosbie's disclosure. In addition, the Examiner did not respond to Appellant's above arguments, that Crosbie (¶¶0044-0047, 0055) discloses that it is the roaming server 22 (the alleged "switch"), not the mobile device 26 (the alleged "access device"), which makes the decision to direct the transfer of the mobile device 26 to a less congested AP (the alleged "re-establishes communication with AP").

Sharma, likewise, also discloses that **the base station controller BSC** 104 (which is not a recited element in Appellant's claim), not the mobile device (the alleged "access device"), which performs load balancing, assigns carrier frequency traffic channels to the BTS (the alleged "AP"), and **executes both hard and soft handoff** (the alleged "re-establishing communication"). In this regard, Sharma also does not overcome Crosbie's above deficiency.

The Examiner's remaining allegation that the Appellant attacks Crosbie's reference individually to show non-obviousness, is therefore, moot.

Accordingly, based on the foregoing rationale, the Appellant maintains that the combination of Crosbie and Sharma does not establish a prima facie case of obviousness to reject Appellant's claim 1. The Appellant respectfully requests that the rejection of independent claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Likewise, independent claims 9, 17, 27 and 37 are similar in many respects to claim 1, and are therefore submitted to be allowable for the same rationale presented in claim 1.

B. Rejection of Dependent Claims 2-8, 10-16, 18-22, 24-26, 28-36 and 38-46

Based on at least the foregoing, the Appellant believes the rejection of independent claims 1, 9, 17, 27 and 37 under 35 U.S.C. § 103(e) as being unpatentable by the combination of Crosbie and Sharma has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-8, 10-16, 18-22, 24-26, 28-36 and 38-46

depend directly or indirectly from independent claims 1, 9, 17, 27 and 37, and are, consequently, also respectfully submitted to be allowable.

B(1). Rejection of Dependent Claims 2, 10 and 18

The Final Office Action (*see* page 5) states the following:

> "As regards to Claims 2, 10& 18, it would have been obvious to one of ordinary skilled in the art that modified system and method discloses the according to claims 1, 9 & 17, comprising access points, which must be in operating range of transmitting wireless station as claimed in order to receive service request message [according to 802.11 protocol: background of Crosbie]."

The Examiner seems to have overlooked Appellant's claim 2 to merely recite "in the operating range", while omitting the remaining claim limitations. Specifically, Appellant's claim 2 recites "interpreting said one or more polling message by said one or more of said plurality of access points, which is located in an operating range of said access device". The Appellant maintains that Crosbie does not disclose the alleged "polling message", let alone "interpreting said one or more polling message by said one or more of said plurality of access points," as recited in Appellant's claim 2. Accordingly, claim 2 is submitted to be allowable. Claims 10 and 18 are also allowable based on the same rationale as stated in claim 2.

B(2). Rejection of Dependent Claims 3-4, 11-12, 19-20, 28-30 and 38-40

The Final Office Action (*see* page 5) states the following:

> "As regards to Claims 3, 4, 11, 12, 19, 20, 28, 29, 30, 38, 39, 40, it would have been obvious to one of ordinary skilled in the art that modified method and system discloses the method according to claims 2, 10,

> 18,27 & 37 comprising selecting an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points [**mobile selects the access points with best quality of service**: (Crosbie: 0044-0047). Official Notice is also taken the concept and advantages for selecting access point for optimal load balancing based on RSSI and load is well known to one of ordinary skilled in the art at the time of invention of made and does not constitute patentable distinction from prior art methods."

The Examiner is referred to Appellant's arguments in claim 1, namely, that Crosbie (see 0044-0047) discloses that it is the roaming server 22 (the alleged "switch"), not the mobile device 26 (the alleged "access device"), which makes the decision to direct the transfer of the mobile device 26 to a less congested AP (the alleged "re-establishes communication with AP").

In this regard, the Appellant maintains that Crosbie and Sharma does not disclose or suggest "selecting access point for optimal load balancing based on RSSI signal strength of the access points," as recited in Appellant's claim 3, or "least load" as recited in claim 4. Claims 11-12, 19-20, 28-30 and 38-40 are also allowable based on the same rationale as stated in claims 3-4.

B(3). Rejection of Dependent Claims 26, 31 and 41

The Examiner in the Final Office Action (*see* pages 5-6) merely bases his rejection arguments on obviousness to one of ordinary skilled in the art, without citation of support from Crosbie or Sharma. The Appellant refers the Examiner to the following 103(a) rejection guidelines:

> "...The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be

> some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142. Since the Examiner has not cited any factual citations for support in his obviousness arguments, the Appellant maintains that claims 26, 31 and 41 are allowable.

B(4). Rejection of Dependent Claims 5-8, 13-16, 21-22, 24-25, 32-36 and 42-46

The Final Office Action (*see* page 6) states the following:

> "Regarding Claims 5-8, 13-16, 21, 22, 24-25, 32-36, 42-46, it would have been obvious to one of ordinary skilled in the art that the modified method and system would teach messaging protocol i.e., communicating according to wired/wireless LAN protocol and messaging sequences according to claims for communicating between access points and switch as claimed because modified method and system is centralized load balancing control method and system. It would have been obvious to one of ordinary skilled in the art that load information communicating between each of access points and switch according to modified method is aggregate load of each access points in order to determine and distribute loads across the network to achieve optimal load balancing."

The Examiner in the Final Office Action (see pages 5-6) merely bases his rejection arguments on obviousness to one of ordinary skilled in the art, without citation of support from Crosbie or Sharma. In this regard, the Appellant maintains that claims 5-8, 13-16, 21-22, 24-25, 32-36 and 42-46 are allowable (*see* the MPEP at § 2142).

The Appellant reserves the right to argue additional reasons to support the allowability of claims 1-22 and 24-46 should such a need arise.

CONCLUSION

For at least the foregoing reasons, the Appellant submits that claims 1-22 and 24-46 are in condition for allowance. Reversal of the Examiner's rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge $540 (to cover the Brief on Appeal Fee) and any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: June 30, 2010

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CLAIMS APPENDIX
(37 C.F.R. § 41.37(c)(1)(viii))

1. A method for communication, the method comprising:

receiving one or more polling message from an access device by one or more of a plurality of access points in a hybrid wired/wireless local area network;

responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load; and

communicating information of said determined optimal load balancing for said one or more of said plurality of access points to said access device, wherein said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said determined optimal load balancing.

2. The method according to claim 1, comprising interpreting said one or more polling message by said one or more of said plurality of access points, which is located in an operating range of said access device.

3. The method according to claim 2, comprising selecting an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

4. The method according to claim 1, comprising selecting said one of said plurality of access points, which comprises a least load by said access device to provide service.

5. The method according to claim 1, comprising:

sending said received one or more polling message from said one or more of a plurality of access points to a switch using a messaging protocol message; and

receiving said one or more polling message by said switch.

6. The method according to claim 2, comprising determining by said switch at least an aggregate load on at least a portion of said plurality of access points.

7. (Previously Presented) The method according to claim 6, comprising sending information corresponding to said determined aggregate load to at least a portion of said plurality of access points using a messaging protocol message.

8. The method according to claim 7, wherein comprising redistributing a load by said switch on said at least a portion of said plurality of access points.

9. A computer-readable medium for storing a computer program for execution by computer, having one or more code section for communication, the one or more code section executable by a computer for causing the computer to perform the steps comprising:

receiving one or more polling message from an access device by one or more of a plurality of access points in a hybrid wired/wireless local area network;

responsive to said one or more polling message, communicating a load on said one or more of said plurality of access points to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load; and

communicating information of said determined optimal load balancing for said one or more of said plurality of access points to said access device, wherein said access device selects and re-establishes communication with one or more of said

plurality of access points based on said communicated information of said optimal load balancing.

10. The computer-readable medium according to claim 9, wherein said one or more code section comprises code for interpreting said at least one polling message by said one or more of said plurality of access points, which is located in an operating range of said access device.

11. The computer-readable medium according to claim 10, wherein said one or more code section comprises selecting an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

12. The computer-readable medium according to claim 9, wherein said one or more code section comprises code for selecting said one of said plurality of access points, which comprises a least load by said access device to provide service.

13. The computer-readable medium according to claim 9, wherein said one or more code section comprises code for:

sending said received one or more polling message from said ~~at least~~ one or more of a plurality of access points to a switch using a messaging protocol message; and

receiving said one or more polling message by said switch.

14. The computer-readable medium according to claim 10, wherein said one or more code section comprises code for determining at least an aggregate load by said switch on at least a portion of said plurality of access points.

15. The computer-readable medium according to claim 14, wherein said one or more code section comprises code for sending information corresponding to said determined aggregate load to at least a portion of said plurality of access points using a messaging protocol message.

16. The computer-readable medium according to claim 15, wherein said one or more code section comprises code for redistributing a load by said switch on said at least a portion of said plurality of access points.

17. A system for communication, the system comprising:

one or more receiver of one or more of a plurality of access points that receives one or more polling message from an access device in a hybrid wired/wireless local area network;

one or more controller that communicates a load on said one or more of said plurality of access points to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated load in response to said one or more polling message; and

one or more transmitter that communicates information of said determined optimal load balancing for said one or more of said plurality of access points to said access device, wherein said access device selects and re-establishes communication with one or more of said plurality of access points based on said communicated information of said optimal load balancing.

18. The system according to claim 17, wherein said one or more controller interprets said one or more polling message, said one or more controller being associated with one or more of said plurality of access points that is located in an operating range of said access device.

19. The system according to claim 18, wherein said one or more controller selects an access point from said plurality of access points having a least load and based on a received signal strength of said plurality of access points.

20. The system according to claim 17, wherein said one or more controller selects said one of said plurality of access points, which comprises a least load by said access device to provide service.

21. The system according to claim 17, wherein said one or more transmitter sends said received one or more polling message from said one or more of a plurality of access points to said switch using a messaging protocol message.

22. (Previously Presented) The system according to claim 21, wherein said one or more receiver is operable to receives said one or more polling message.

23. (Cancelled)

24. The system according to claim 17, wherein said one or more controller sends information corresponding to an aggregate determined load to at least a portion of said plurality of access points using a messaging protocol message.

25. The system according to claim 24, wherein said one or more controller redistributes a load on said at least a portion of said plurality of access points.

26. The system according to claim 17, wherein said at least one controller is one or more of: a bandwidth management controller, a quality of service controller, a load balancing controller, a session controller and a network management controller.

27. A method for communication, the method comprising:

transmitting one or more polling message from a mobile station in a hybrid wired/wireless local area network, wherein said transmitted one or more polling message causes one or more of a plurality of access points that receives said transmitted one or more polling message to communicate a corresponding load to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated corresponding load;

receiving from said one or more of said plurality of access points, said determined optimal load balancing for said one or more of said plurality of access points; and

selecting and re-establishing communication by said mobile station with one of said plurality of access points based on said received optimal load balancing.

28. The method according to claim 27, comprising re-establishing communication by said mobile station with said one of said plurality of access points based on a received signal strength of said one or more of said plurality of access points.

29. The method according to claim 27, comprising selecting said one of said plurality of access points for said re-establishing of said communication based on said determined optimal load balancing and a RSSI associated with one of said plurality of access points.

30. The method according to claim 29, comprising selecting said one of said plurality of access points having a least optimal load balancing for said re-establishing of said communication.

31. The method according to claim 30, comprising broadcasting said one or more polling message from said mobile station within said hybrid wired/wireless local area network.

32. The method according to claim 31, wherein said broadcasted one or more polling message is received by said plurality of access points within said hybrid wired/wireless local area network.

33. The method according to claim 32, wherein said switch determines an aggregate load on said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted one or more polling message.

34. The method according to claim 33, wherein said switch reconfigures said one or more of said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted one or more polling message.

35. The method according to claim 27, wherein a load on said one or more of said plurality of access points is redistributed based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted one or more polling message.

36. The method according to claim 27, wherein an aggregate bandwidth of said one or more of said plurality of access points is optimized based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted one or more polling message.

37. A system for communication, the system comprising:

one or more processors in a mobile station, said one or more processors are that transmits one or more polling message from said mobile station in a hybrid wired/wireless local area network, wherein said transmitted one or more polling message causes one or more of a plurality of access points that receives said transmitted one or more polling message to communicate a corresponding load to a switch, wherein said switch determines optimal load balancing for said one or more of said plurality of access points based on said communicated corresponding load;

said or more processors are that receives from said one or more of said plurality of access points, information of said determined optimal load balancing for said one or more of said plurality of access points; and

said or more processors are that selects and re-establishes communication by said mobile station with one of said plurality of access points based on said information for said determined optimal load balancing.

38. The system according to claim 37, wherein said or more processors are that re-establishes said communication by said mobile station with said one of said plurality of access points based on a received signal strength of said one or more of said plurality of access points.

39. The system according to claim 37, wherein said or more processors are that selects said one of said plurality of access points for said re-establishing of said communication based on said determined optimal load balancing and a RSSI associated with one of said plurality of access points.

40. The system according to claim 39, wherein said or more processors are that selects said one of said plurality of access points having a least optimal load balancing for said re-establishing of said communication.

41. The system according to claim 40, wherein said or more processors are that broadcasts said one or more polling message from said mobile station within said hybrid wired/wireless local area network.

42. The system according to claim 41, wherein said broadcasted one or more polling message is received by said plurality of access points within said hybrid wired/wireless local area network.

43. The system according to claim 42, wherein said switch determines an aggregate load on said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted one or more polling message.

44. The system according to claim 43, wherein said switch reconfigures said one or more of said plurality of access points based on said determined corresponding load for said one or more of said plurality of access points and said broadcasted polling message.

45. The system according to claim 37, wherein a load on said one or more of said plurality of access points is redistributed based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted one or more polling message.

46. The system according to claim 37, wherein an aggregate bandwidth of said one or more of said plurality of access points is optimized based on one or both of said determined corresponding load of said one or more of said plurality of access points, and said transmitted one or more polling message.

EVIDENCE APPENDIX
(37 C.F.R. § 41.37(c)(1)(ix))

(1) United States Pub. No. 20020085719 ("Crosbie"), entered into record by the Examiner in the 1/7/2010 Final Office Action.

(2) United States Pat. No. 6,069,871 ("Sharma"), entered into record by the Examiner in the 1/7/2010 Final Office Action.

RELATED PROCEEDINGS APPENDIX
(37 C.F.R. § 41.37(c)(1)(x))

The Appellant is unaware of any related appeals or interferences.